ONWA K-9115CF

MODEL

SERVICE MANUAL

MC-Service

SPECIFICATIONS

Item	Content
Dimensions	360mm(W) × 334mm(H) × 378mm(D)
Mass	10.5kg (TV set only)
TV System	PAL B / G
Channel Coverage	
VHF low band (VL)	E2 ~ E4, SS1 ~ SS3, S1 ~ S2
	A ~ C
VHF high band (VH)	E5 ~ E12, S3 ~ S20
	D ~ H
UHF band	21~69
Frequency Range	
VHF low band (VL)	48.25MHz ~ 112.25MHz
VHF high band (VH)	119.25MHz ~ 294.25MHz
UHF band	471.25MHz ~ 855.25MHz
Intermediate Frequency	
Video	38.9MHz
Sound	33.4MHz
Chroma	34.47MHz
Video/Sound Separation	5.5 MHz
Antenna Input Impedance	75Ω unbalanced
Power Input	230V AC, 50Hz
Power Consumption	70W
Picture Tube	14" (36cm) diagonal
High Voltage	≤ 26kV(at zero beam current)
Speaker	5cm × 9cm (16Ω)
Audio Output	1W (max.)
AV Connection	21 pin scart socket

Design & specification subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes.
   For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠)on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED(NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B + setting should be checked or adjusted (See B + ADJUSTMENT).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

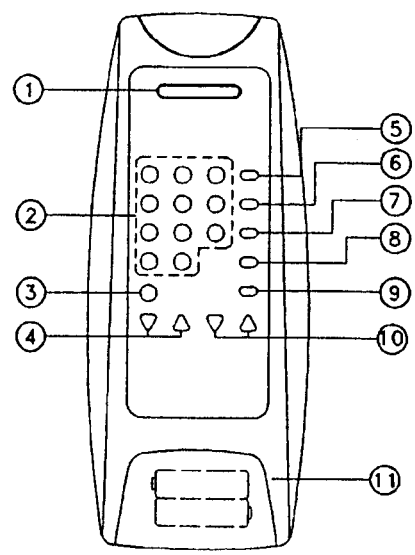
7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

SPECIFIC SERVICE INSTRUCTIONS

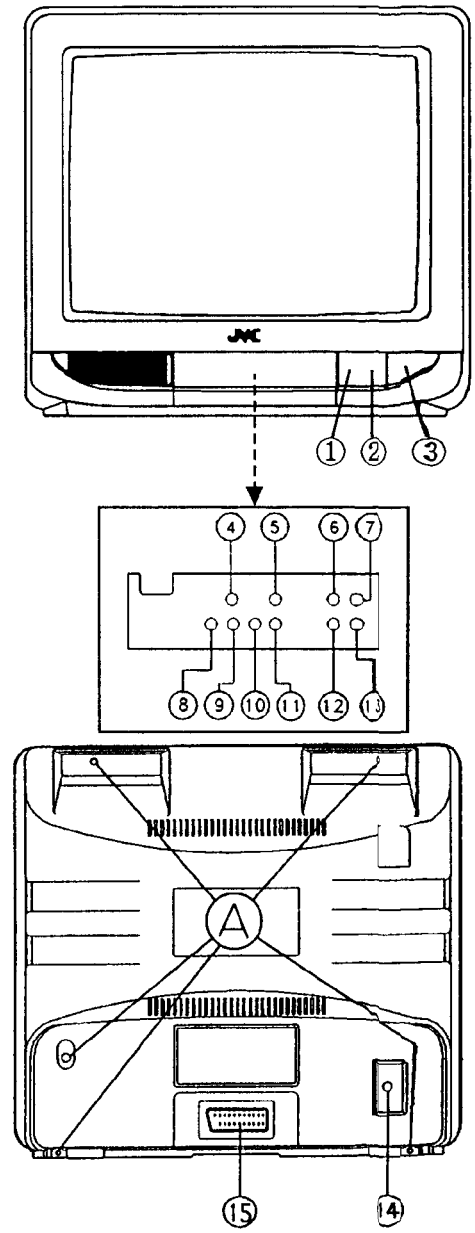
■ CONTROL LOCATION

1. Stand By Button
2. Number Buttons
3. Picture Selector Button
4. Volume and Picture Function Up/Down Buttons
5. Mute Button
6. Sleep Button
7. Recall Button
8. Normal Button
9. TV/AV Button
10. Program Up/Down Buttons
11. Battery Compartment



■ CONTROL LOCATION

1. Remote Sensor
2. Power Indicator
3. Power Switch (ON / OFF)
4. Auto Tune Button
5. Picture Selector Button
6. Volume / Picture Function Button (+)
7. Program Up Button
8. TV / AV Button
9. Tune Down Button
10. Tune Up Button
11. Memory Button
12. Volume / Picture Function Button (-)
13. Program Down Button
14. Antenna Input Tuner
15. 21 Pin Scart Socket



■ DISASSEBLY PROCEDURE

Note : Before starting work,disconnect the power plug from the outlet.

HOW TO REMOVE THE REAR COVER

1.Remove the 5 screws marked Ⓐ .
2.Remove the rear cover backward.

SERVICE ADJUSTMENTS

■ PREASE READ BEFORE ATTEMPTING SERVICE

1. Never disconnect any leads while receiver is in operation.
2. Disconnect all power before attempting any repairs.
3. Do not short any portion of the circuit while power is on.
4. For safety reasons, all parts replaced should be identical, (for parts and part numbers see parts list).
5. Before alignment the set must be pre-heated for 30 minutes or more and erase magnetism thoroughly from CRT front chassis frame by erase coil.

■ TEST EQUIPMENTS

1. Pattern generator
2. Oscilloscope
3. Digital multi meter
4. Demagnetizing coil
5. Philips pattern generator
6. Frequency counter

■ ADJUSTMENTS PROCEDURES

B + ADJUSTMENT

1. Connect the digital volt meter to TP401.
2. Adjust semi-fixed resistor VR901 until meter reading DC 112 .25V ±0.25V.

HORIZONTAL CIRCUIT ADJUSTMENT

1. Receive colour bar or crosshatch pattern.
2. IC301 (Pin 28, 29) short by 1K Ohm resistor.
3. Adjust VR303 to obtain the picture running at center.
4. Remove the 1K Ohm resistor.

COLOUR DEMODULATOR ADJUSTMENT, DELAY LINE ADJUSTMENT

1. Receive Philips Pattern.
2. Set Contrast control to minimum position.
3. Set Colour control to maximum position.
4. Connect Oscilloscope to TP301 (B-out).
5. Adjust CT301 to obtain the waveform as in Fig.1.
6. Adjust VR301 to obtain the waveform as in Fig.1.
7. Adjust T301 to obtain the waveform as in Fig.1.

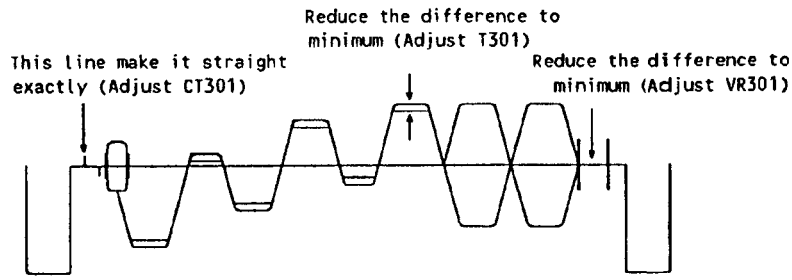


Fig.1

THE 4 PIN WIRE ASS'Y CONNECT FOR CAI HONG CRT (Fig.2)

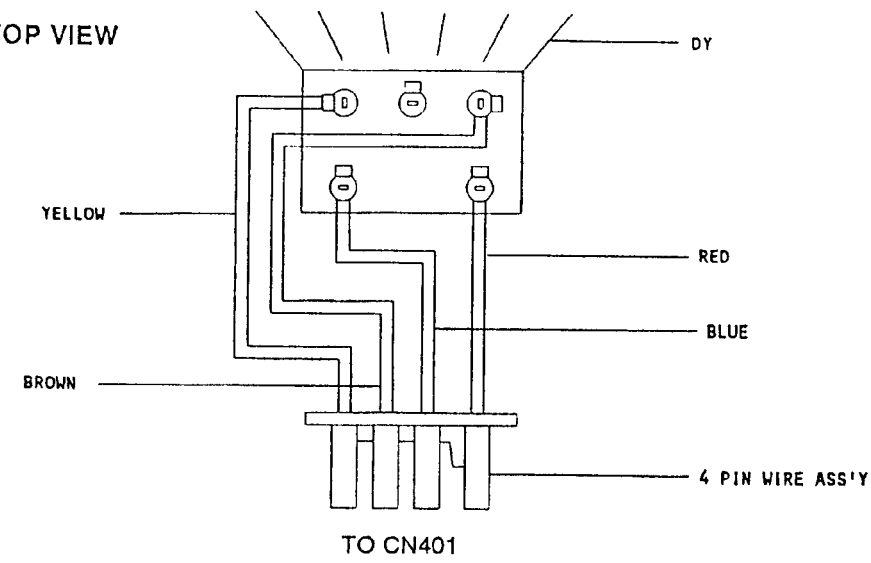


Fig.2

VERTICAL CIRCUIT ADJUSTMENT

1. Receive the crosshatch pattern.
2. Connect the Frequency Counter between V-DEFLECTION YOKE connector and GND.
3. Connect the lead wire from TP106 to GND.
4. Adjust V-HOLD (VR304) to the reading 45 Hz ±0.5Hz.
5. Remove the lead wire from TP106 to GND.
6. Adjust V-SIZE (VR401) control to obtain a normal picture.

WHITE BALANCE ADJUSTMENT

1. Receive a black and white picture signal.
2. Turn the red, green and blue CUT OFF (VR501, VR502, VR504) controls (in the CRT PW Board) to middle position and turn the DRIVE (VR503,VR505) controls (in the CRT PW Board) to middle position.
3. Turn the Screen control on the FBT to minimum position.
4. Set the SUB-BRIGHTNESS control (VR305) to middle position, then set the Contrast, Brightness and Colour control to minimum position.
5. CN403 (PIN1,2) with join together.
6. Connect volt meter between R508 and ground, and adjust Brightness control to the reading of DC138V±2V. If DC138V can not be obtain, adjust the SUB-BRIGHTNESS control (VR305).
7. Slowly turn the Screen control clockwise to the point where a horizontal line just illuminates.
8. Adjust VR501 to get a red horizontal line on CRT.
9. Adjust VR502 to get a yellow horizontal line on CRT.
10. Adjust VR504 to get a white horizontal line on CRT.
11. Take the joiner out of CN403.
12. Adjust DRIVE (VR503, VR505) controls to obtain a uniform white picture.

FOCUS ADJUSTMENT

1. Set Contrast control to maximum position and Brightness control to middle position.
2. Adjust Focus control (on the FBT) to obtain a sharpest and clearest picture on the CRT.

RF AGC ADJUSTMENT

1. Receive a broadcast.
2. Turn the RF AGC VR (VR101) so that noise appears on the screen.
3. Turn the RF AGC VR (VR101) until the noise disappears.
4. Change the channel and check that the picture is normal.

SUB-BRIGHTNESS ADJUSTMENT

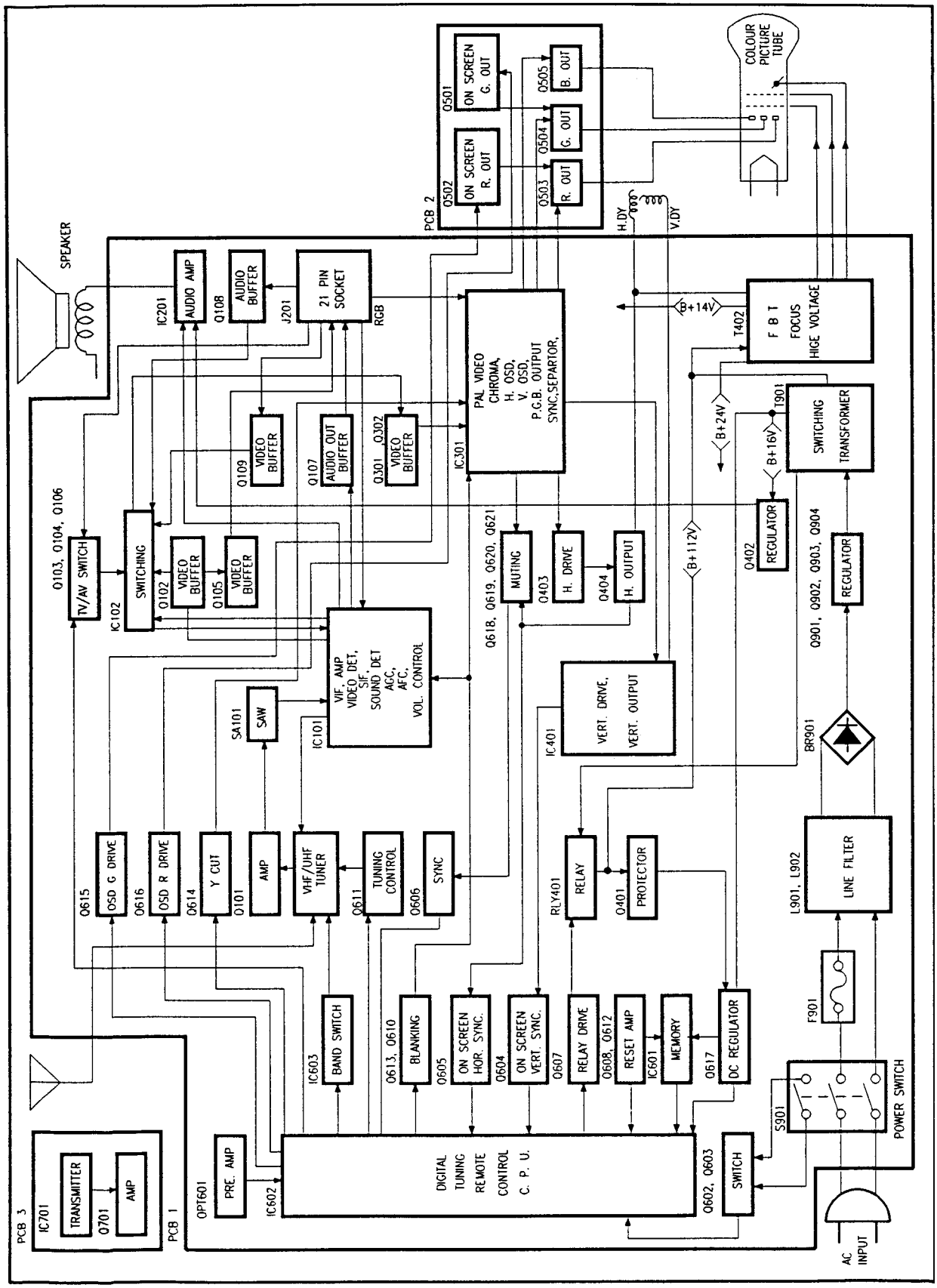
- Check the white balance is adjusted.

1. Receive an entirely black signal.
2. Adjust the SUB-BRIGHTNESS VR (VR305) until the entirely picture lights.

ON SCREEN POSITION ADJUSTMENT

1. Receive the crosshatch pattern.
2. Display the on-screen character. Adjust the ON-SCREEN (VR601) so that the on-screen position becomes center.

BLOCK DIAGRAM



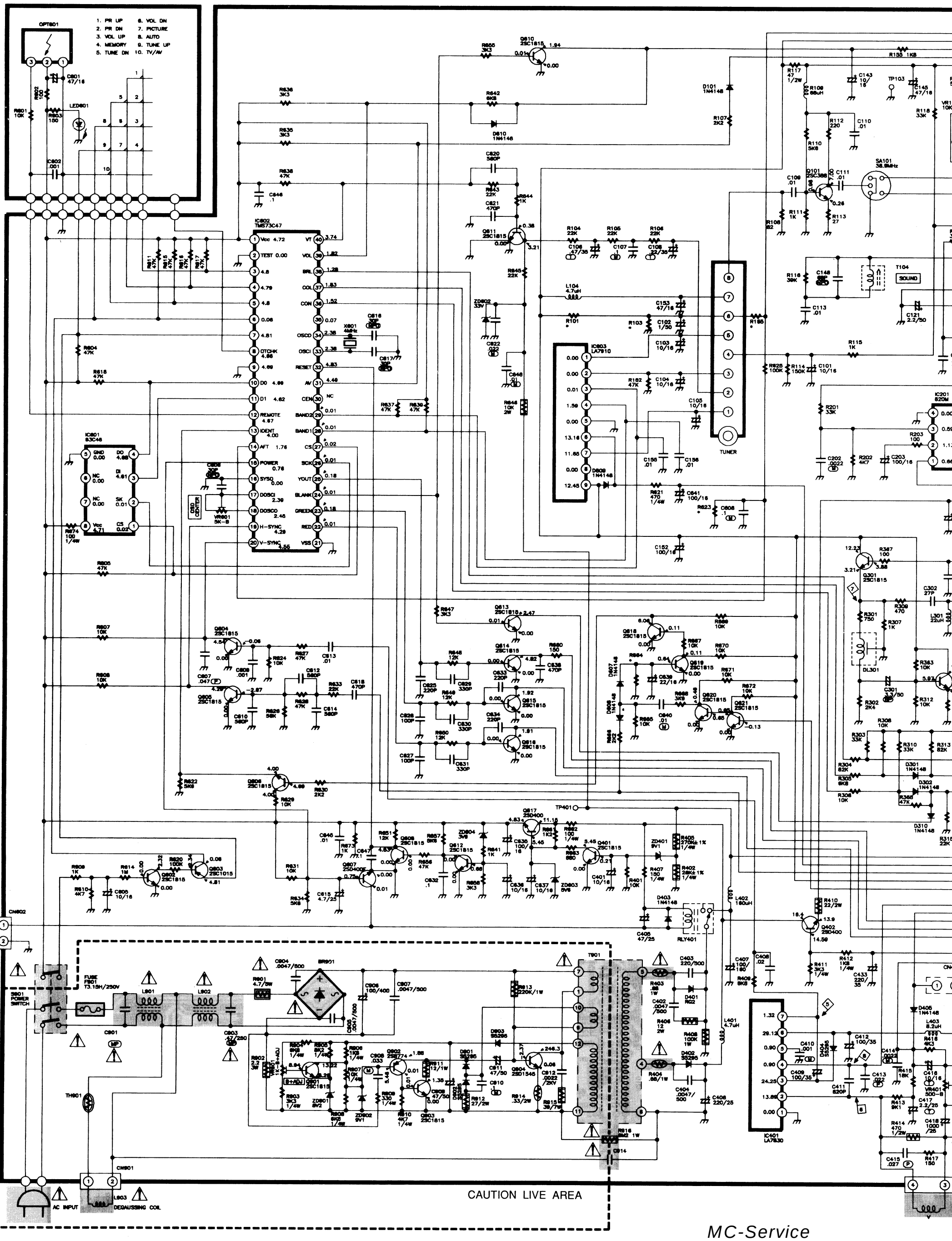
■ CIRCUIT DIAGRAM (MAIN)

■ NOTE ON USING CIRC

1.SAFETY

The components identified by the
For continued safety replace safet
recommended parts.

◇Since the circuit diagram is a sta
may be subject to change for impr



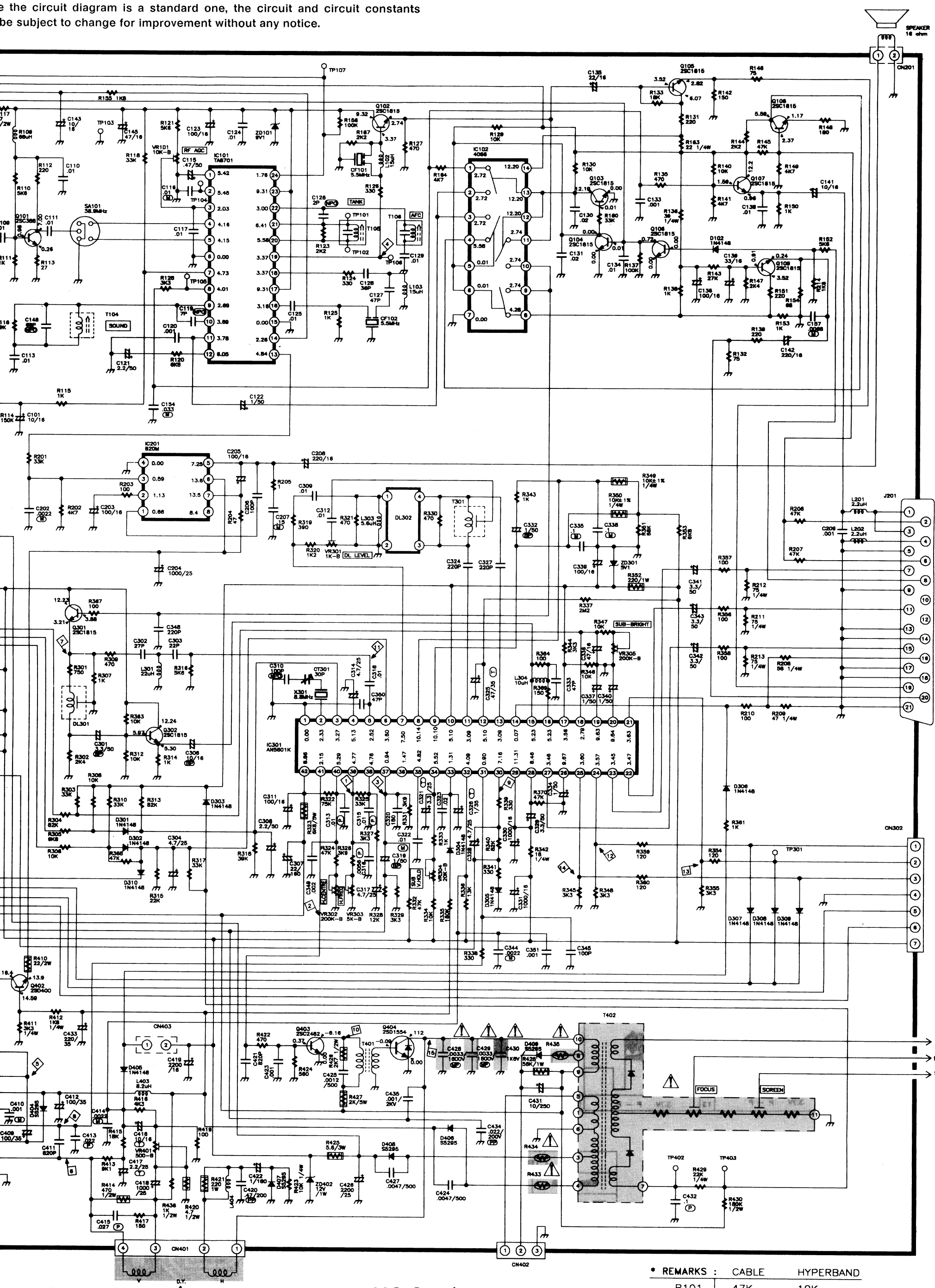
STANDARD CIRCUIT DIAGRAM

OTE ON USING CIRCUIT DIAGRAMS

ETY

components identified by the ⚠ symbol and shading are critical for safety.
ontinued safety replace safety critical components only with manufactures
nmended parts.

e the circuit diagram is a standard one, the circuit and circuit constants
be subject to change for improvement without any notice.



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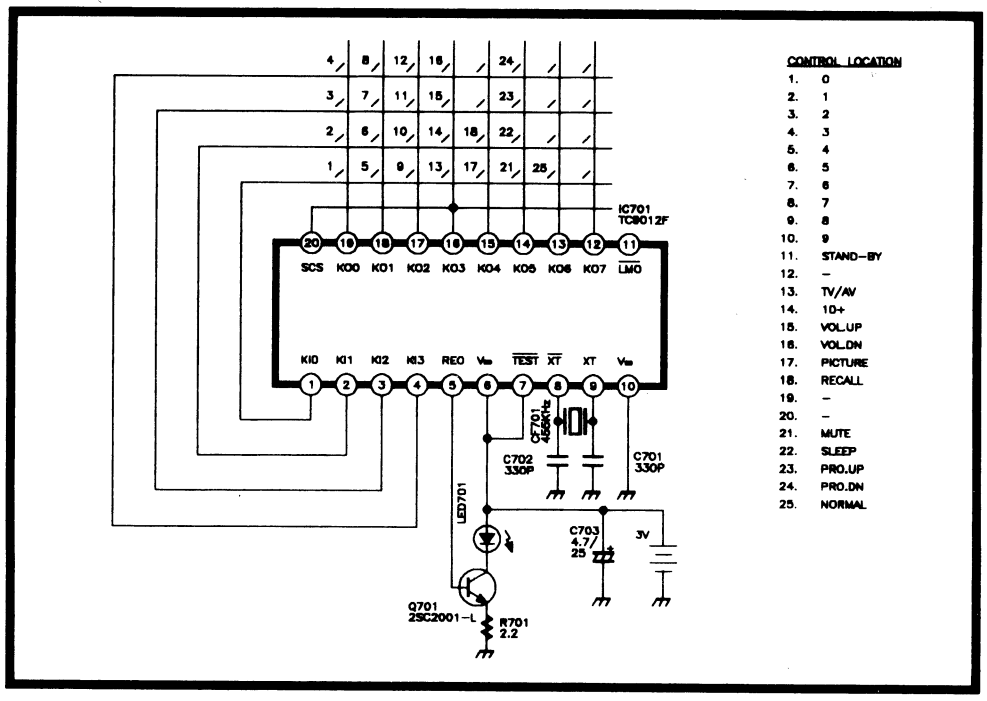
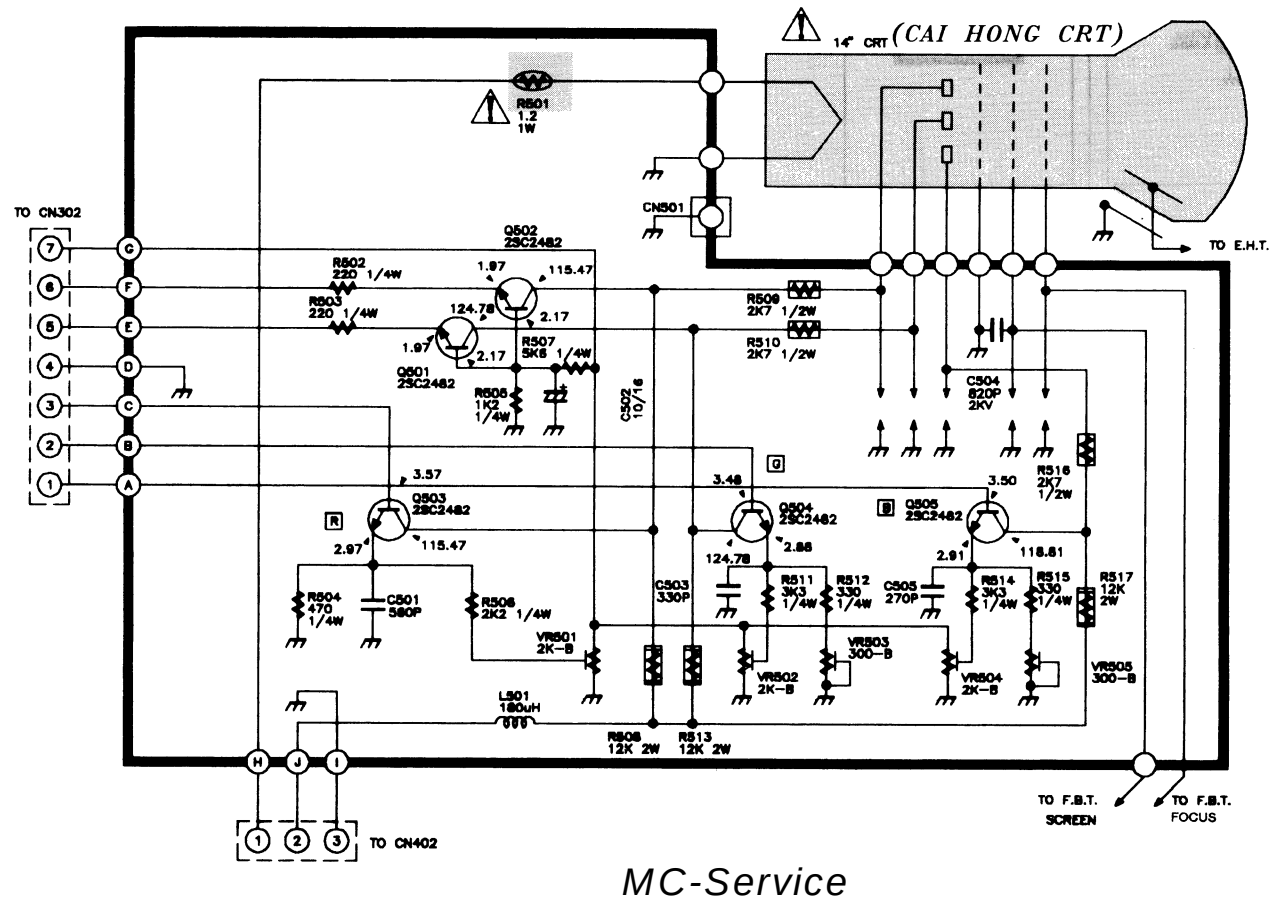
* REMARKS :	CABLE	HYPERBAND
R101	47K	10K
R103	56K	33K
R165	NIL	47K
R623	100K	1M
R664	27K	39K

■ CIRCUIT DIAGRAM (CRT & HANDSET)

HANDSET BOARD



CRT BOARD



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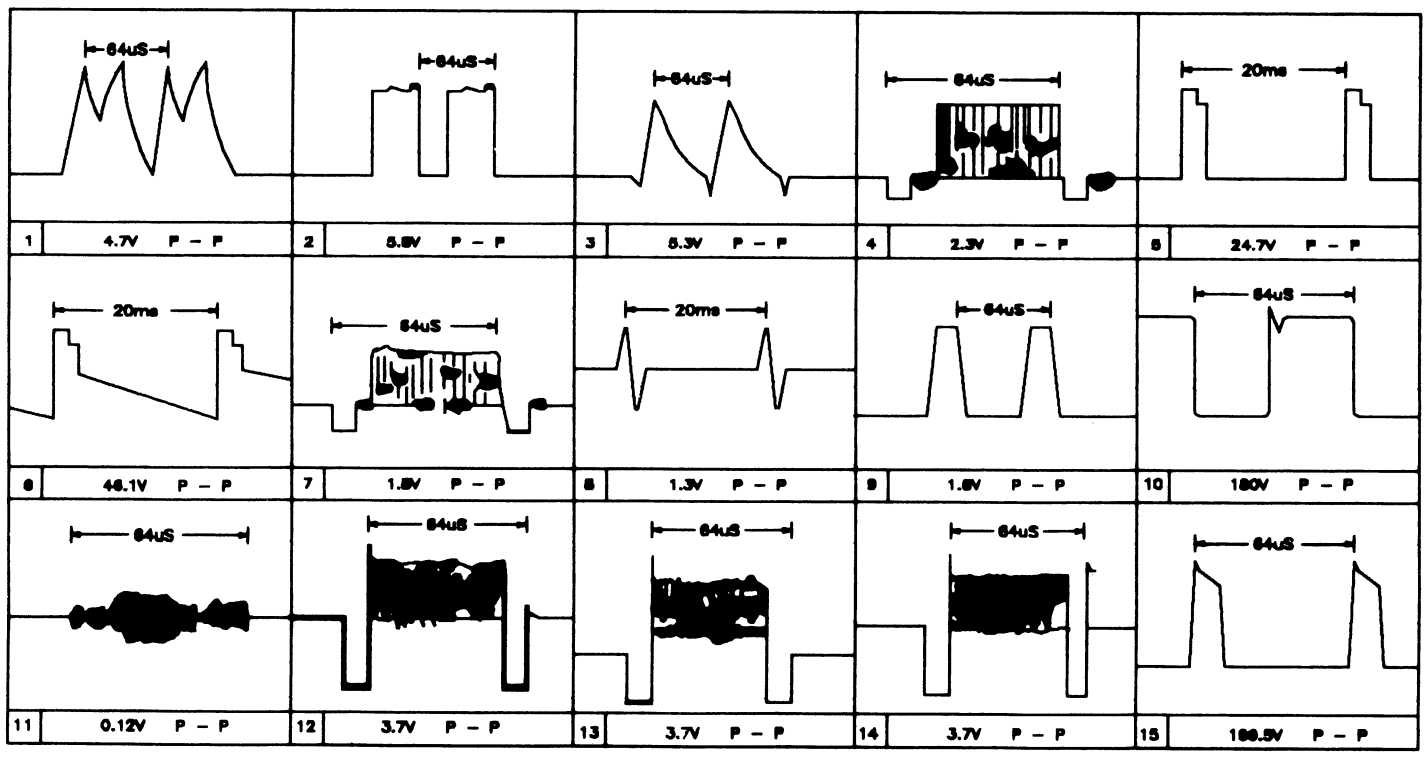
WAVEFORM



NOTE:

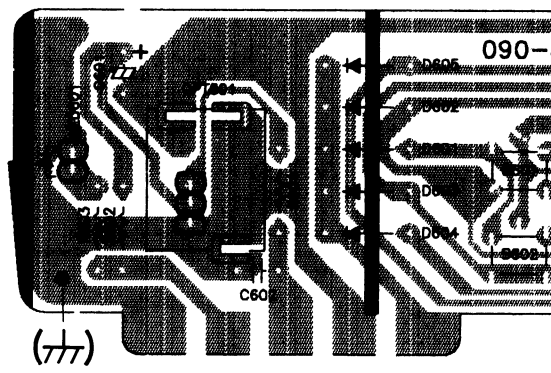
(1) ALL CAPACITORS ARE IN uF UNLESS OTHERWISE NOTED. ALL CAPACITORS ARE 50WV UNLESS OTHERWISE NOTED.
(2) CAPACITOR NOT SPECIFICALLY DESIGNATED ARE CERAMIC ACPACITORS.
(3) ALL RESISTORS ARE IN OHM 1/16 WATT UNLESS OTHERWISE NOTED.
(4) RESISTOR NOT SPECIFICALLY DESIGNATED ARE CARBON FILM RESISTORS.
(5) DC VOLTAGE ARE MEASURED FROM POINT INDICATED TO THE CIRCUIT GROUND WITH A DIGITAL MULTIMETER TEST.
(6) WAVEFORMS ARE TAKEN WITH SETTING CONTROLS TO A NORMAL CONDITIONS (COLOR PHILIPS PATTERN.)
(7) THIS CIRCUIT DIAGRAM IS SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.
(8) ⚠ SAFETY CRITICAL DEVICE.

CIRCUIT SYMBOLS		
RESISTOR	CAPACITOR	
NONFLAMMABLE	ELECTROLYIC	POLYPROPYLENE
FUSEBLE	BI-POLAR ELECTROLYIC	MYLAR
CEMENT	TANTALUM	
METAL OXIDE	METALLIZED POLYESTER	
THERMISTOR	POLYESTER FILM	

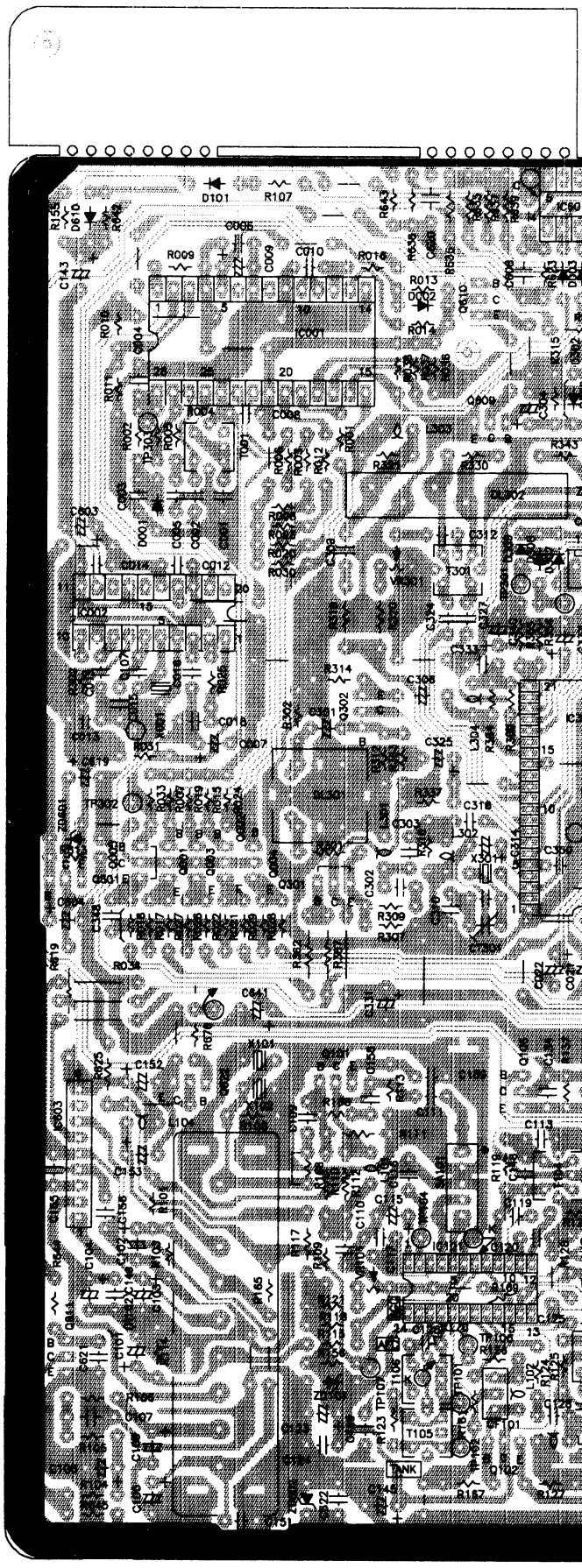
■ PATTERN DIAGRAM

■ PATTERN DIAGRAM (CONTROL P

(BOTTOM VIEW)



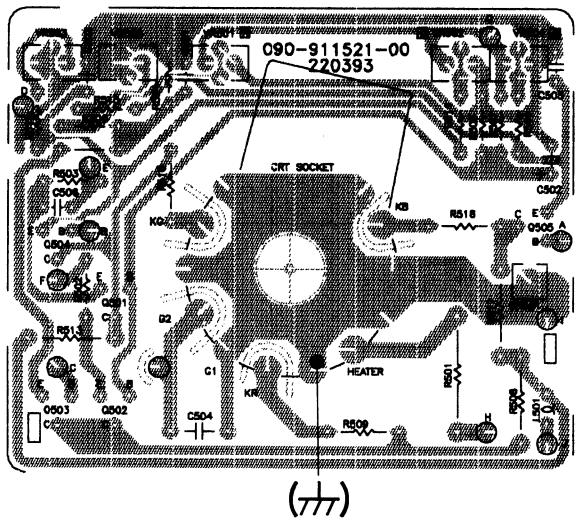
■ PATTERN DIAGRAM (MAIN PWB)



RN DIAGRAM

■ PATTERN DIAGRAM (CRT PWB)

(BOTTOM VIEW)

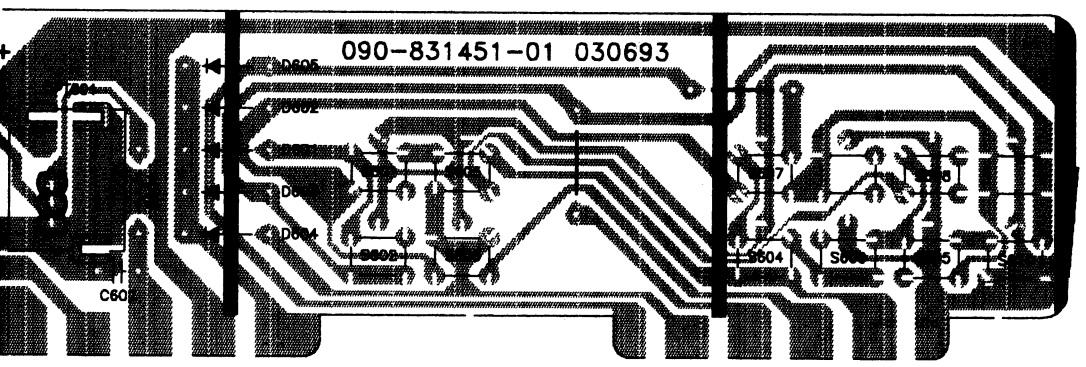


■ SEMICONDUCTOR SHAPES

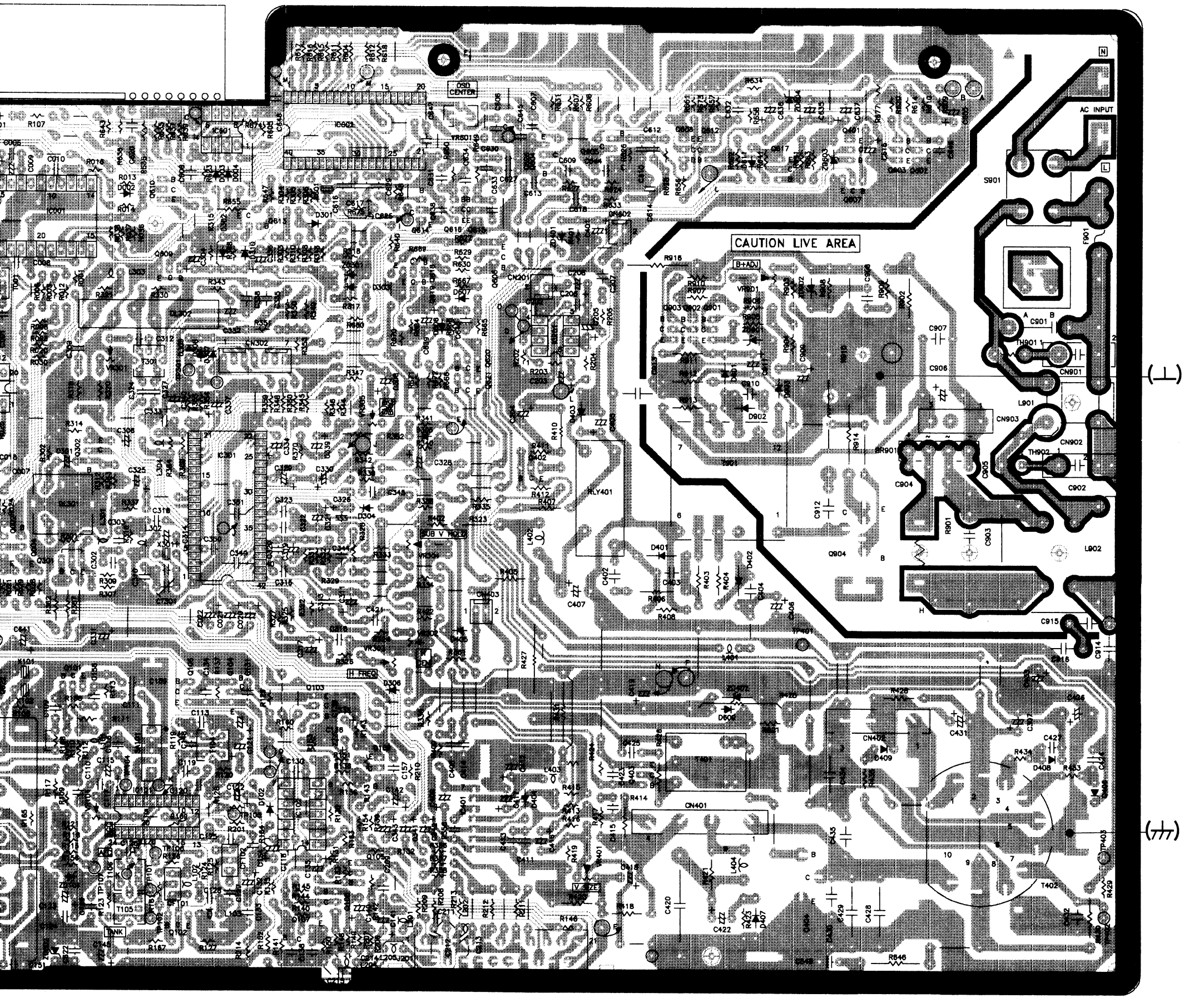
TOP VIEW	TBA820M XL93LC46	TOP VIEW	TMS73C47	TOP VIEW	TA8701N	E C B	2SD400F	B C E	2SD1554 2SD1545
E C B	2SC2482	TOP VIEW	AN5601K	TOP VIEW	HCF4066	1 9	LA7910	1 7	LA7830
E C B	2SB774T 2SA1015 2SC388A 2SC1815Y	TOP VIEW		TOP VIEW					

ERN DIAGRAM (CONTROL PWB)

(BOTTOM VIEW)



IAGRAM (MAIN PWB)



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PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% - 10%	+50% - 10%	+80% - 20%	+100% - 0%

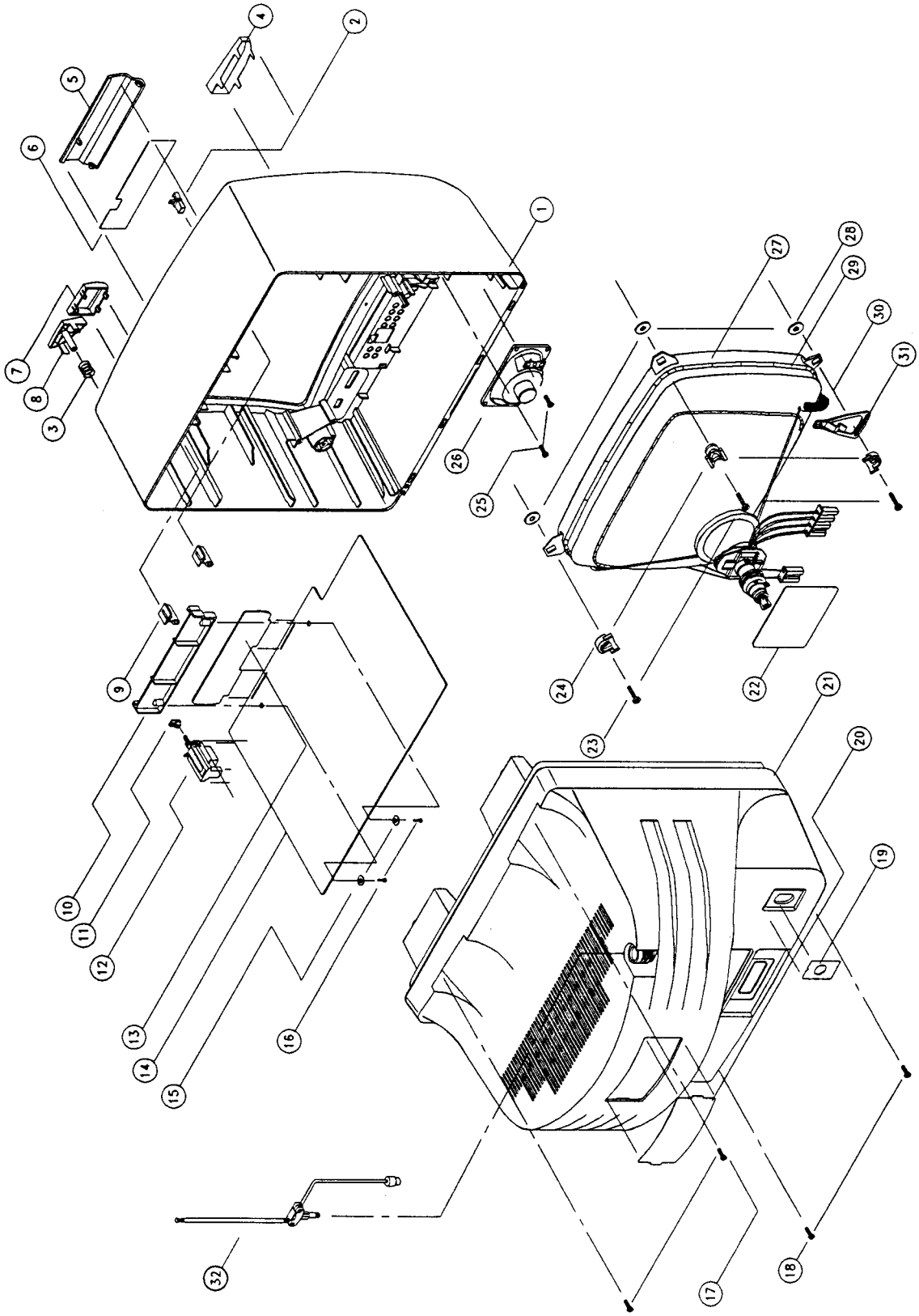
■ EXPLODED VIEW PARTS LIST

⚠	REF. No.	PARTS No.	PARTS NAME	REMARKS
	1	200-861401-01R	FRONT CABINET	
	2	702-391201-02	DOOR LOCKER ASS'Y	
	3	477-682101-01	COMPRESSION SPRING	
	4	403-861401-01	SPEAKER GRILLE	
	5	219-861401-01S	PANEL DOOR	
	6	418-861404-01	PRESET OVERLAY	
	7	263-861401-01D	SENSOR LENS	
	8	292-861401-01S	POWER KNOB	
	9	229-831401-01	MOUNTING BRACKET	(x2)
	10	229-911502-01	CONTROL PW BOARD MTG BKT	
	11	239-391201-01	ADAPTOR FOR POWER SWITCH	
⚠	12	046-100001-14A	POWER SWITCH	
	13	————	CONTROL PW BOARD ASS'Y	
	14	————	MAIN PW BOARD ASS'Y	
	15	530-080032-08	FIBRE WASHER	(x2)
	16	612-300110-10	SELF-TAPPING SCREW	(x2) W/T 3x10mm
	17	614-500416-10	SELF-TAPPING SCREW	(x2) B/T 5x16mm
	18	614-400416-10	SELF-TAPPING SCREW	(x2) B/T 4x16mm
	19	418-911544-01	TUNER COVER W/SILK-PRINTING	
	20	412-861401-04	MODEL PLATE	
	21	202-911503-01B	BACK CABINET(BLACK)	
	22	————	CRT SOCKET PW BOARD ASS'Y	
	23	614-500238-10	SELF-TAPPING SCREW	(x4) B/T 5x38mm
	24	229-371502-01	C.R.T. MOUNTING CLIP	(x4)
	25	614-400408-10	SELF-TAPPING SCREW	(x2) 4x8mm
	26	066-962023-09	SPEAKER	
⚠	27	102-314000-13	C.R.T. (ITC) (CAI.HONG)	37SX110Y22-DC05
	28	334-371601-01	RUBBER RING	(x4) T = 2mm
⚠	29	108-400141-03	DEGAUSSING COIL ASS'Y	L903
	30	477-371601-01	C.R.T. SPRING	
	31	259-911501-01	DEGAUSSING COIL CLIP	(x2)
	32	779-691001-01	ROD ANTENNA ASS'Y	

■ REMOTE HANDSET UNIT (790-001511-08)

⚠	REF. No.	PARTS No.	PARTS NAME	REMARKS
		210-000901-01	BATTERY COVER	

■ EXPLODED VIEW



PRINTED WIRING BOARD PART LIST

MAIN PW BOARD ASS'Y

VARIABLE RESISTOR

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION	
VR101	112-103541-06	V R(RF AGC)	10KΩ	B
VR301	112-102542-06	V R(DL LEVEL)	1KΩ	B
VR302	112-204541-06	V R(H.CENTRE)	200KΩ	B
VR303	112-502541-06	V R(H.FREQ)	5KΩ	B
VR304	112-203541-06	V R(SUB V.HOLD)	20KΩ	B
VR305	112-204541-06	V R(SUB BRIGHT)	200KΩ	B
VR401	112-501541-06	V R(V.SIZE)	500Ω	B
VR601	112-502531-08	V R(OSD CENTER)	5KΩ	B
VR901	112-102321-08B	V R(B+ ADJUST)	1KΩ	B

RESISTOR

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION	
R101	013-473005-12H	C R	47KΩ	1/16W 5%
R103	013-563005-12H	C R	56KΩ	1/16W 5%
R104	013-223005-12H	C R	22KΩ	1/16W 5%
R105	013-223005-12H	C R	22KΩ	1/16W 5%
R106	013-223005-12H	C R	22KΩ	1/16W 5%
R107	013-222005-12H	C R	2.2KΩ	1/16W 5%
R108	013-820005-12H	C R	82Ω	1/16W 5%
R109	105-680101-02	FIXED INDUCTOR COIL	68μH	
R110	013-562005-12H	C R	5.6KΩ	1/16W 5%
R111	013-102005-12H	C R	1KΩ	1/16W 5%
R112	013-221005-12H	C R	220Ω	1/16W 5%
R113	013-270005-12H	C R	27Ω	1/16W 5%
R114	013-154005-12H	C R	150KΩ	1/16W 5%
R115	013-102005-12H	C R	1KΩ	1/16W 5%
R116	013-393005-12H	C R	39KΩ	1/16W 5%
R117	013-470205-12	C R	47Ω	1/2W 5%
R118	013-333005-12H	C R	33KΩ	1/16W 5%
R120	013-682005-12H	C R	6.8KΩ	1/16W 5%
R121	013-562005-12H	C R	5.6KΩ	1/16W 5%
R123	013-222005-12H	C R	2.2KΩ	1/16W 5%
R124	013-331005-12H	C R	330Ω	1/16W 5%
R125	013-102005-12H	C R	1KΩ	1/16W 5%
R126	013-331005-12H	C R	330Ω	1/16W 5%
R127	013-471005-12H	C R	470Ω	1/16W 5%
R128	013-332005-12H	C R	3.3KΩ	1/16W 5%
R129	013-103005-12H	C R	10KΩ	1/16W 5%
R130	013-103005-12H	C R	10KΩ	1/16W 5%
R131	013-221005-12H	C R	220Ω	1/16W 5%
R132	013-750005-12H	C R	75Ω	1/16W 5%
R133	013-183005-12	C R	18KΩ	1/16W 5%
R135	013-471005-12H	C R	470Ω	1/16W 5%
R136	013-390105-12	C R	39Ω	1/4W 5%
R137	013-104005-12	C R	100KΩ	1/16W 5%
R138	013-102005-12H	C R	1KΩ	1/16W 5%
R139	013-221005-12H	C R	220Ω	1/16W 5%
R140	013-103005-12H	C R	10KΩ	1/16W 5%
R141	013-472005-12H	C R	4.7KΩ	1/16W 5%
R142	013-151005-12H	C R	150Ω	1/16W 5%
R143	013-273005-12H	C R	27KΩ	1/16W 5%
R144	013-222005-12H	C R	2.2KΩ	1/16W 5%
R145	013-473005-12H	C R	47KΩ	1/16W 5%
R146	013-750005-12H	C R	75Ω	1/16W 5%
R147	013-242005-12H	C R	2.4KΩ	1/16W 5%
R148	013-181005-12	C R	180Ω	1/16W 5%
R149	013-472005-12	C R	4.7KΩ	1/16W 5%
R150	013-102005-12H	C R	1KΩ	1/16W 5%
R151	013-221005-12H	C R	220Ω	1/16W 5%
R152	013-562005-12H	C R	5.6KΩ	1/16W 5%
R153	013-102005-12H	C R	1KΩ	1/16W 5%
R154	013-680005-12H	C R	68Ω	1/16W 5%
R155	013-182005-12H	C R	1.8KΩ	1/16W 5%
R156	013-104005-12H	C R	100KΩ	1/16W 5%
R160	013-333005-12H	C R	33KΩ	1/16W 5%
R162	013-473005-12	C R	47KΩ	1/16W 5%
R163	013-220105-12	C R	22Ω	1/4W 5%
R164	013-472005-12	C R	4.7KΩ	1/16W 5%
R167	013-222005-12H	C R	2.2KΩ	1/16W 5%
R201	013-333005-12H	C R	33KΩ	1/16W 5%
R202	013-472005-12H	C R	4.7KΩ	1/16W 5%
R203	013-101005-12H	C R	100Ω	1/16W 5%
R204	013-470005-12H	C R	47Ω	1/16W 5%
R205	013-109005-12H	C R	1Ω	1/16W 5%
R206	013-473005-12	C R	47KΩ	1/16W 5%
R207	013-473005-12	C R	47KΩ	1/16W 5%
R208	013-560105-12	C R	56Ω	1/4W 5%
R209	013-470105-12	C R	47Ω	1/4W 5%
R210	013-101005-12H	C R	100Ω	1/16W 5%
R211	013-750105-12	C R	75Ω	1/4W 5%
R212	013-750105-12	C R	75Ω	1/4W 5%
R213	013-750105-12	C R	75Ω	1/4W 5%
R214	013-182005-12	C R	1.8KΩ	1/16W 5%
R301	013-751005-12H	C R	750Ω	1/16W 5%
R302	013-242005-12H	C R	2.4KΩ	1/16W 5%
R303	013-333005-12H	C R	33KΩ	1/16W 5%
R304	013-823005-12H	C R	82KΩ	1/16W 5%
R305	013-682005-12H	C R	6.8KΩ	1/16W 5%
R306	013-103005-12H	C R	10KΩ	1/16W 5%
R307	013-102005-12H	C R	1KΩ	1/16W 5%
R308	013-103005-12H	C R	10KΩ	1/16W 5%
R309	013-471005-12H	C R	470Ω	1/16W 5%
R310	013-333005-12H	C R	33KΩ	1/16W 5%
R312	013-103005-12H	C R	10KΩ	1/16W 5%
R313	013-823005-12H	C R	82KΩ	1/16W 5%
R314	013-102005-12H	C R	1KΩ	1/16W 5%
R315	013-223005-12H	C R	22KΩ	1/16W 5%
R316	013-562005-12H	C R	5.6KΩ	1/16W 5%
R317	013-333005-12H	C R	33KΩ	1/16W 5%
R318	013-393005-12H	C R	39KΩ	1/16W 5%
R319	013-391005-12H	C R	390Ω	1/16W 5%
R320	013-122005-12H	C R	1.2KΩ	1/16W 5%

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
R321	013-471005-12H	C R	470Ω 1/16W 5%
R322	013-753005-12H	C R	75KΩ 1/16W 5%
R323	013-682605-75	OM R	6.8KΩ 5W 5%
R324	013-473005-12H	C R	47KΩ 1/16W 5%
R325	013-333005-12H	C R	33KΩ 1/16W 5%
R326	013-392005-12H	C R	3.9KΩ 1/16W 5%
R327	013-332005-12H	C R	3.3KΩ 1/16W 5%
R328	013-123005-12H	C R	12KΩ 1/16W 5%
R329	013-332005-12H	C R	3.3KΩ 1/16W 5%
R330	013-471005-12H	C R	470Ω 1/16W 5%
R331	013-392005-12H	C R	3.9KΩ 1/16W 5%
R332	013-473005-12H	C R	47KΩ 1/16W 5%
R333	013-102005-12H	C R	1KΩ 1/16W 5%
R334	013-103005-12H	C R	10KΩ 1/16W 5%
R335	013-184005-12H	C R	180KΩ 1/16W 5%
R336	013-133005-12H	C R	13KΩ 1/16W 5%
R337	013-225005-12H	C R	2.2MΩ 1/16W 5%
R338	013-331005-12H	C R	330Ω 1/16W 5%
R339	013-331005-12H	C R	330Ω 1/16W 5%
R340	013-823005-12H	C R	82KΩ 1/16W 5%
R341	013-331005-12H	C R	330Ω 1/16W 5%
R342	013-180105-12	C R	18Ω 1/4W 5%
R343	013-102005-12H	C R	1KΩ 1/16W 5%
R344	013-332005-12H	C R	3.3KΩ 1/16W 5%
R345	013-332005-12H	C R	3.3KΩ 1/16W 5%
R346	013-103005-12H	C R	10KΩ 1/16W 5%
R347	013-103005-12H	C R	10KΩ 1/16W 5%
R348	013-332005-12H	C R	3.3KΩ 1/16W 5%
R349	013-103101-72	OM R	10KΩ 1/4W F
R350	013-103101-72	OM R	10KΩ 1/4W F
R351	013-683005-12H	C R	68KΩ 1/16W 5%
R352	013-221305-75	OM R	220Ω 1W 5%
R353	013-682005-12H	C R	6.8KΩ 1/16W 5%
R354	013-121005-12H	C R	120Ω 1/16W 5%
R355	013-332005-12H	C R	3.3KΩ 1/16W 5%
R356	013-101005-12H	C R	100Ω 1/16W 5%
R357	013-101005-12H	C R	100Ω 1/16W 5%
R358	013-101005-12H	C R	100Ω 1/16W 5%
R359	013-121005-12H	C R	120Ω 1/16W 5%
R360	013-121005-12H	C R	120Ω 1/16W 5%
R361	013-102005-12H	C R	1KΩ 1/16W 5%
R363	013-103005-12H	C R	10KΩ 1/16W 5%
R364	013-101005-12	C R	100Ω 1/16W 5%
R367	013-101005-12H	C R	100Ω 1/16W 5%
R368	013-473005-12H	C R	47KΩ 1/16W 5%
R369	013-151005-12	C R	150Ω 1/16W 5%
R370	013-473005-12H	C R	47KΩ 1/16W 5%
R401	013-103005-12H	C R	10KΩ 1/16W 5%
R402	013-263101-72	OM R	26KΩ 1/4W 1%
⚠ R403	013-688205-82	FP R	0.68Ω 1/2W 5%
⚠ R404	013-688205-82	FP R	0.68Ω 1/2W 5%
R405	013-274101-72	OM R	270KΩ 1/4W 1%
R406	013-120405-75	OM R	12Ω 2W 5%
R407	013-151105-12	C R	150Ω 1/4W 5%
R408	013-104305-75	OM R	100KΩ 1W 5%
R409	013-682005-12H	C R	6.8KΩ 1/16W 5%
R410	013-220405-75	OM R	22Ω 2W 5%

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
R411	013-332105-12	C R	3.3KΩ 1/4W 5%
R412	013-182105-12	C R	1.8KΩ 1/4W 5%
R413	013-912005-12H	C R	9.1KΩ 1/16W 5%
R414	013-471205-22	FP R	470Ω 1/2W 5%
R415	013-183005-12H	C R	18KΩ 1/16W 5%
R416	013-432005-12H	C R	4.3KΩ 1/16W 5%
R417	013-151005-12H	C R	150Ω 1/16W 5%
R419	013-101005-12H	C R	100Ω 1/16W 5%
R420	013-479205-22	FP R	4.7Ω 1/2W 5%
R421	013-221305-75	OM R	220Ω 1W 5%
R422	013-471005-12H	C R	470Ω 1/16W 5%
R423	013-103105-12	C R	10KΩ 1/4W 5%
R424	013-561005-12H	C R	560Ω 1/16W 5%
R425	013-569505-76	FP R	5.6Ω 3W 5%
R426	013-272205-22	FP R	2.7KΩ 1/2W 5%
R427	013-202605-75	OM R	2KΩ 5W 5%
R428	013-563305-75	OM R	56KΩ 1W 5%
R429	013-223105-12	C R	22KΩ 1/4W 5%
R430	013-184205-12	C R	180KΩ 1/2W 5%
⚠ R433	013-688205-82	FP R	0.68Ω 1/2W 5%
⚠ R434	013-688205-82	FP R	0.68Ω 1/2W 5%
⚠ R435	013-688205-82	FP R	0.68Ω 1/2W 5%
R436	013-102205-12	C R	1KΩ 1/2W 5%
R604	013-473005-12H	C R	47KΩ 1/16W 5%
R605	013-473005-12H	C R	47KΩ 1/16W 5%
R607	013-103005-12H	C R	10KΩ 1/16W 5%
R608	013-103005-12H	C R	10KΩ 1/16W 5%
R609	013-102005-12H	C R	1KΩ 1/16W 5%
R610	013-472005-12H	C R	4.7KΩ 1/16W 5%
R611	013-473005-12H	C R	47KΩ 1/16W 5%
R614	013-105005-12H	C R	1MΩ 1/16W 5%
R615	013-473005-12H	C R	47KΩ 1/16W 5%
R616	013-473005-12H	C R	47KΩ 1/16W 5%
R617	013-473005-12H	C R	47KΩ 1/16W 5%
R618	013-473005-12H	C R	47KΩ 1/16W 5%
R620	013-104005-12H	C R	100KΩ 1/16W 5%
R621	013-471105-12	C R	470Ω 1/4W 5%
R622	013-562005-12H	C R	5.6KΩ 1/16W 5%
R623	013-104005-12H	C R	100KΩ 1/16W 5%
R624	013-103005-12H	C R	10KΩ 1/16W 5%
R625	013-104005-12H	C R	100KΩ 1/16W 5%
R626	013-563005-12H	C R	56KΩ 1/16W 5%
R627	013-473005-12H	C R	47KΩ 1/16W 5%
R628	013-473005-12H	C R	47KΩ 1/16W 5%
R629	013-103005-12H	C R	10KΩ 1/16W 5%
R630	013-222005-12H	C R	2.2KΩ 1/16W 5%
R631	013-103005-12H	C R	10KΩ 1/16W 5%
R633	013-223005-12H	C R	22KΩ 1/16W 5%
R634	013-562005-12H	C R	5.6KΩ 1/16W 5%
R635	013-332005-12H	C R	3.3KΩ 1/16W 5%
R636	013-332005-12H	C R	3.3KΩ 1/16W 5%
R637	013-473005-12H	C R	47KΩ 1/16W 5%
R638	013-473005-12H	C R	47KΩ 1/16W 5%
R639	013-473005-12H	C R	47KΩ 1/16W 5%
R641	013-102005-12H	C R	1KΩ 1/16W 5%
R642	013-682005-12H	C R	6.8KΩ 1/16W 5%

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
R643	013-223005-12H	C R	22KΩ 1/16W 5%
R644	013-102005-12H	C R	1KΩ 1/16W 5%
R645	013-223005-12H	C R	22KΩ 1/16W 5%
R646	013-103405-75	OM R	10KΩ 2W 5%
R647	013-332005-12H	C R	3.3KΩ 1/16W 5%
R648	013-123005-12H	C R	12KΩ 1/16W 5%
R649	013-123005-12H	C R	12KΩ 1/16W 5%
R650	013-123005-12H	C R	12KΩ 1/16W 5%
R651	013-123005-12H	C R	12KΩ 1/16W 5%
R655	013-332005-12H	C R	3.3KΩ 1/16W 5%
R656	013-473005-12H	C R	47KΩ 1/16W 5%
R657	013-562005-12H	C R	5.6KΩ 1/16W 5%
R658	013-332005-12H	C R	3.3KΩ 1/16W 5%
R660	013-151005-12H	C R	150Ω 1/16W 5%
R661	013-122005-12H	C R	1.2KΩ 1/16W 5%
R662	013-101305-12	C R	100Ω 1W 5%
R663	013-681005-12H	C R	680Ω 1/16W 5%
R664	013-273005-12H	C R	27KΩ 1/16W 5%
R665	013-103005-12H	C R	10KΩ 1/16W 5%
R666	013-222005-12H	C R	2.2KΩ 1/16W 5%
R667	013-103005-12H	C R	10KΩ 1/16W 5%
R668	013-392005-12H	C R	3.9KΩ 1/16W 5%
R669	013-103005-12H	C R	10KΩ 1/16W 5%
R670	013-103005-12H	C R	10KΩ 1/16W 5%
R671	013-103005-12H	C R	10KΩ 1/16W 5%
R672	013-103005-12H	C R	10KΩ 1/16W 5%
R673	013-102005-12H	C R	1KΩ 1/16W 5%
R674	013-101105-12	C R	100Ω 1/4W 5%
R677	013-104005-12	C R	100KΩ 1/16W 5%
⚠ R901	013-479605-54	UNF R	4.7Ω 5W 5%
R902	013-229505-75	OM R	2.2Ω 3W 5%
R903	013-332105-12	C R	3.3KΩ 1/4W 5%
R904	013-682105-12	C R	6.8KΩ 1/4W 5%
R905	013-822105-12	C R	8.2KΩ 1/4W 5%
R906	013-182105-12	C R	1.8KΩ 1/4W 5%
R907	013-103105-12	C R	10KΩ 1/4W 5%
R908	013-682105-12	C R	6.8KΩ 1/4W 5%
R909	013-331105-12	C R	330Ω 1/4W 5%
R910	013-472105-12	C R	4.7KΩ 1/4W 5%
R911	013-120305-75	OM R	12Ω 1W 5%
R912	013-270405-75	OM R	27Ω 2W 5%
R913	013-224305-75	OM R	220KΩ 1W 5%
R914	013-338410-82	FP R	0.33Ω 2W 10%
R915	013-390805-75	OM R	39Ω 7W 5%
⚠ R916	013-825305-92	HV R	8.2MΩ 1W 5%

CAPACITOR

C101	127-106047-01V	E CAP.	10μF 16V 20%
C102	127-105077-01V	E CAP.	1μF 50V 20%
C103	127-106047-01V	E CAP.	10μF 16V 20%
C104	127-106047-01V	E CAP.	10μF 16V 20%
C105	127-106047-01V	E CAP.	10μF 16V 20%
C106	124-474061-01V	TAN CAP.	0.47μF 35V 10%
C107	026-104111-01	M CAP.	0.1μF 100V 10%
C108	124-224061-01V	TAN CAP.	0.22μF 35V 10%
C109	123-103370-30V	C CAP.	0.01μF 50V Z
C110	123-103370-30V	C CAP.	0.01μF 50V Z
C111	123-103370-30V	C CAP.	0.01μF 50V Z
C113	123-103370-30V	C CAP.	0.01μF 50V Z
C115	127-474077-01V	E CAP.	0.47μF 50V 20%
C116	026-103111-01	M CAP.	0.01μF 100V 10%
C117	123-103370-30V	C CAP.	0.01μF 50V Z
C119	123-070300-13V	C CAP.	7pF 50V
C120	123-102370-30V	C CAP.	0.001μF 50V Z
C121	127-225077-01V	E CAP.	2.2μF 50V 20%
C123	127-107047-01V	E CAP.	100μF 16V 20%
C124	123-103370-30V	C CAP.	0.01μF 50V Z
C125	123-103370-30V	C CAP.	0.01μF 50V Z
C126	123-020300-13V	C CAP.	2pF 50V
C127	123-470350-10V	C CAP.	47pF 50V 10%
C128	123-360350-10V	C CAP.	36pF 50V 10%
C129	123-103370-30V	C CAP.	0.01μF 50V Z
C130	123-203370-30V	C CAP.	0.02μF 50V Z
C131	123-203370-30V	C CAP.	0.02μF 50V Z
C133	123-102370-30V	C CAP.	0.001μF 50V Z
C134	123-103370-30V	C CAP.	0.01μF 50V Z
C135	127-226047-01V	E CAP.	22μF 16V 20%
C136	127-107047-01V	E CAP.	100μF 16V 20%
C138	123-103370-30V	C CAP.	0.01μF 50V Z
C139	127-336047-01V	E CAP.	33μF 16V 20%
C141	127-106047-01V	E CAP.	10μF 16V 20%
C142	127-227047-01V	E CAP.	220μF 16V 20%
C143	127-106047-01V	E CAP.	10μF 16V 20%
C145	127-476047-01V	E CAP.	47μF 16V 20%
C148	123-680340-13V	C CAP.	68pF 50V 5%
C152	127-107047-01V	E CAP.	100μF 16V 20%
C153	127-476047-01V	E CAP.	47μF 16V 20%
C154	026-333111-01	M CAP.	0.033μF 100V 10%
C155	123-103370-30	C CAP.	0.01μF 50V Z
C156	123-103370-30	C CAP.	0.01μF 50V Z
C157	026-682111-01	M CAP.	0.0068μF 100V 10%
C202	026-222111-01V	M CAP.	0.0022μF 100V 10%
C203	127-107047-01	E CAP.	100μF 16V 20%
C204	127-108057-01	E CAP.	1000μF 25V 20%
C205	127-107047-01V	E CAP.	100μF 16V 20%
C206	123-101350-10V	C CAP.	100pF 50V 10%
C207	026-154111-01	M CAP.	0.15μF 100V 10%
C208	127-227047-01V	E CAP	220μF 16V 20%
C209	123-102370-30V	C CAP.	0.001μF 50V Z
C301	127-335077-21V	NP E CAP.	3.3μF 50V 20%
C302	123-270350-10V	C CAP.	27pF 50V 10%
C303	123-220350-10V	C CAP.	22pF 50V 10%
C304	127-106047-01V	E CAP.	10μF 16V 20%
C306	127-106047-21	NP E CAP.	10μF 16V 20%
C307	127-226135-81	E CAP.	22μF 160V H
C308	127-225077-01V	E CAP.	2.2μF 50V 20%
C309	123-103370-30V	C CAP.	0.01μF 50V Z
C310	123-101340-13V	C CAP.	100pF 50V 5%
C311	127-107047-01V	E CAP.	100μF 16V 20%
C312	123-103370-30V	C CAP.	0.01μF 50V Z
C313	026-103071-11V	POLY FILM CAP.	0.01μF 50V 10%
C314	127-475057-01V	E CAP.	4.7μF 25V 20%

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
C315	026-103071-11V	POLY FILM CAP.	0.01μF 50V 10%
C316	026-562071-11V	POLY FILM CAP.	0.0056μF 50V 10%
C317	127-475057-01V	E CAP.	4.7μF 25V 20%
C318	123-103370-30V	C CAP.	0.01μF 50V Z
C319	127-105077-21V	NP E CAP.	1μF 50V 20%
C320	123-181350-10V	C CAP.	180pF 50V 10%
C321	124-335051-01V	TAN CAP.	3.3μF 25V 10%
C322	026-103071-11V	M CAP.	0.01μF 50V 10%
C323	123-203370-30V	C CAP.	0.02μF 50V Z
C324	123-221350-10V	C CAP.	220pF 50V 10%
C325	124-474061-01V	TAN CAP.	0.47μF 35V 10%
C326	124-105061-01V	TAN CAP.	1μF 35V 10%
C327	123-221350-10V	C CAP.	220pF 50V 10%
C328	127-475057-01V	E CAP.	4.7μF 25V 20%
C329	127-335077-01V	E CAP.	3.3μF 50V 20%
C330	127-108047-01	E CAP.	1000μF 16V 20%
C331	127-108047-01	E CAP.	1000μF 16V 20%
C332	127-105077-21V	NP E CAP.	1μF 50V 20%
C333	123-470350-10V	C CAP.	47pF 50V 10%
C334	127-105077-01V	E CAP.	1μF 50V 20%
C335	026-104111-01	M CAP.	0.1μF 100V 10%
C336	127-476047-01V	E CAP.	47μF 16V 20%
C337	127-105077-01V	E CAP.	1μF 50V 20%
C338	026-104111-01	M CAP.	0.1μF 100V 10%
C339	127-107047-01V	E CAP.	100μF 16V 20%
C340	127-105077-01V	E CAP.	1μF 50V 20%
C341	127-335077-01V	E CAP.	3.3μF 50V 20%
C342	127-335077-01V	E CAP.	3.3μF 50V 20%
C343	127-335077-01V	E CAP.	3.3μF 50V 20%
C344	026-222111-01	M CAP.	0.0022μF 100V 10%
C345	123-101350-10	C CAP.	100pF 50V 10%
C349	123-202370-30	C CAP.	0.002μF 50V Z
C350	123-470350-10	C CAP.	47pF 50V 10%
C351	123-102370-30	C CAP.	0.001μF 50V Z
C401	127-106047-01V	E CAP.	10μF 16V 20%
C402	123-472580-42	C CAP.	0.0047μF 500V P
C403	123-221550-40	C CAP.	220pF 500V 10%
C404	123-472580-42	C CAP.	0.0047μF 500V P
C405	127-476057-01V	E CAP.	47μF 25V 20%
C406	127-227057-01V	E CAP.	220μF 25V 20%
C407	127-107135-81	E CAP.	100μF 160V H
C408	123-203370-30V	C CAP.	0.02μF 50V Z
C409	127-107067-01V	E CAP.	100μF 35V 20%
C410	026-102111-01V	M CAP.	0.001μF 100V 10%
C411	123-821350-10V	C CAP.	820pF 50V 10%
C412	127-107067-01V	E CAP.	100μF 35V 20%
C413	026-223071-11V	POLY FILM CAP.	0.022μF 50V 10%
C414	026-222111-01V	M CAP.	0.0022μF 100V 10%
C415	026-273071-11	POLY FILM CAP	0.027μF 50V 10%
C416	124-106041-01V	TAN CAP.	10μF 16V 10%
C417	124-225051-01V	TAN CAP.	2.2μF 25V 10%
C418	127-108057-01	E CAP.	1000μF 25V 20%
C419	127-228047-01	E CAP.	2200μF 16V 20%
C420	026-474200-31	PP CAP.	0.47μF 200V 5%
C421	123-821350-10V	C CAP.	820pF 50V 10%
C422	127-105135-01V	E CAP.	1μF 160V H

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
C423	123-102370-30	C CAP.	0.001μF 50V Z
C424	123-472580-42V	C CAP.	0.0047μF 500V P
C425	123-122550-40V	C CAP.	1200pF 500V 10%
C426	127-228057-01	E CAP.	2200μF 25V 20%
C427	123-472580-42V	C CAP.	0.0047μF 500V P
⚠ C428	026-332160-41	MP CAP.	0.0033μF 1600V 5%
⚠ C429	026-332160-41	MP CAP.	0.0033μF 1600V 5%
⚠ C430	026-152160-41	C CAP.	0.015μF 1600V 5%
C431	127-106215-81	E CAP.	10μF 250V M
C432	026-104071-11	POLY FILM CAP.	0.1μF 50V 10%
C433	127-227067-01	E CAP.	220μF 35V 20%
C434	026-223201-31	PP CAP.	0.022μF 200V 10%
C435	123-102850-40	C CAP.	0.001μF 2KV 10%
C605	127-106047-01V	E CAP.	10μF 16V 20%
C606	123-300340-13V	C CAP.	30pF 50V 5%
C607	026-473071-11V	POLY FILM CAP.	0.047μF 50V 10%
C608	026-104111-01	M CAP.	0.1μF 100V 10%
C609	123-102370-30V	C CAP.	0.001μF 50V Z
C610	123-561350-10V	C CAP.	560pF 50V 10%
C612	123-561350-10V	C CAP.	560pF 50V 10%
C613	123-103370-30V	C CAP.	0.01μF 50V Z
C614	123-561350-10V	C CAP.	560pF 50V 10%
C615	127-475057-01V	E CAP.	4.7μF 25V 20%
C616	123-300340-13	C CAP.	30pF 50V 5%
C617	123-300340-13	C CAP.	30pF 50V 5%
C618	123-471350-10V	C CAP.	470pF 50V 10%
C620	123-561350-10	C CAP.	560pF 50V 10%
C621	123-471350-10V	C CAP.	470pF 50V 10%
C622	026-223111-01V	M CAP.	0.022μF 100V 10%
C625	123-221350-10V	C CAP.	220pF 50V 10%
C626	123-101350-10V	C CAP.	100pF 50V 10%
C627	123-101350-10V	C CAP.	100pF 50V 10%
C629	123-331340-10V	C CAP.	330pF 50V 10%
C630	123-331340-10V	C CAP.	330pF 50V 10%
C631	123-331340-10V	C CAP.	330pF 50V 10%
C632	123-104270-30V	C CAP.	0.1μF 25V Z
C633	123-221350-10V	C CAP.	220pF 50V 10%
C634	123-221350-10V	C CAP.	220pF 50V 10%
C635	127-107047-01V	E CAP.	100μF 16V 20%
C636	127-106047-01V	E CAP.	10μF 16V 20%
C637	127-106047-01V	E CAP.	10μF 16V 20%
C638	123-471350-10V	C CAP.	470pF 50V 10%
C639	127-106057-01V	E CAP.	10μF 25V 20%
C640	026-103111-01V	M CAP.	0.01μF 100V 10%
C641	127-107047-01V	E CAP.	100μF 16V 20%
C645	123-103370-30V	C CAP.	0.01μF 50V Z
C646	123-104270-30V	C CAP.	0.1μF 25V Z
C647	123-104270-30	C CAP.	0.1μF 25V Z
C648	026-103111-01	M CAP.	0.01μF 100V 10%
⚠ C901	026-224211-25	MP CAP.	0.22μF 250V 10%
⚠ C902	026-474211-21C	MP CAP.	0.47μF AC250V K
⚠ C903	026-474211-21C	MP CAP.	0.47μF AC250V K
C904	123-472580-42V	C CAP.	0.0047μF 500V P
C905	123-472580-42V	C CAP.	0.0047μF 500V P
C906	127-107401-01	ELECT COND	100μF 400V 10%
C907	123-472580-42	C CAP.	0.0047μF 400V M
C908	026-333111-01V	M CAP.	0.033μF 100V 10%

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
C909	127-476077-01V	E CAP.	47μF 50V 20%
C910	026-104111-01	M CAP.	0.1μF 100V 10%
C911	127-476077-01V	E CAP.	47μF 50V 20%
C912	123-222840-40	C CAP.	0.0022μF 2KV 5%
⚠ C915	123-472467-41	C CAP.	0.0047μF 400V M
⚠ C916	123-472467-41	C CAP.	0.0047μF 400V M
CT301	022-300101-03	TRIM CAP.	30pF

TRANSFORMER

T104	002-670000-02	SOUND IFT COIL	
T105	002-370000-02	TANK IFT COIL	
T106	002-370000-02	TANK IFT COIL	
T301	002-770004-03	CHROMA IFT COIL	
T401	001-190010-96	HORI DRIVE TRANSFORMER	
⚠ T402	101-214022-04	FLYBACK TRANSFORMER	(FCK-14A028)
⚠ T901	001-419220-94	SWITCHING TRANSFORMER	

COIL

L102	105-150101-02V	FIXED INDUCTOR COIL	15μH
L103	105-150101-02V	FIXED INDUCTOR COIL	15μH
L104	105-479101-02V	FIXED INDUCTOR COIL	4.7μH
L201	105-229101-02	FIXED INDUCTOR COIL	2.2μH
L202	105-229101-02	FIXED INDUCTOR COIL	2.2μH
L301	105-220101-06V	FIXED INDUCTOR COIL	22μH
L303	105-569101-02V	FIXED INDUCTOR COIL	5.6μH
L304	105-100101-02V	FIXED INDUCTOR COIL	10μH
L401	105-479101-02V	FIXED INDUCTOR COIL	4.7μH
L402	105-161101-01	CHOKE COIL	160μH
L403	105-829101-02V	FIXED INDUCTOR COIL	8.2μH
L404	105-650052-03	FIXED INDUCTOR COIL	65μH
⚠ L901	001-190013-95	CHOKE TRANSFORMER	

DIODE

D101	1N4148	SI.DIODE
D102	1N4148	SI.DIODE
D301	1N4148	SI.DIODE
D302	1N4148	SI.DIODE
D303	1N4148	SI.DIODE
D304	1N4148	SI.DIODE
D305	1N4148	SI.DIODE
D306	1N4148	SI.DIODE
D307	1N4148	SI.DIODE
D308	1N4148	SI.DIODE
D309	1N4148	SI.DIODE
D310	1N4148	SI.DIODE
D401	RG2	RECTIFIER DIODE
D402	S5295	RECTIFIER DIODE
D403	1N4148	SI.DIODE
D404	S5295	RECTIFIER DIODE
D405	1N4148	SI.DIODE
D406	S5295	RECTIFIER DIODE
D407	S5295	RECTIFIER DIODE
D408	S5295	RECTIFIER DIODE

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
D409	S5295	RECTIFIER DIODE	
D607	1N4148	SI.DIODE	
D608	1N4148	SI.DIODE	
D609	1N4148	SI.DIODE	
D610	1N4148	SI.DIODE	
D901	S5295	RECTIFIER DIODE	
D902	S5295	RECTIFIER DIODE	
D903	S5295	RECTIFIER DIODE	
⚠ BR901	D2SBA	RECTIFIER	
ZD101	MA1091-M	ZENER DIODE	9V1
ZD301	5V1	ZENER DIODE	
ZD401	MA1091-M	ZENER DIODE	9V1
ZD402	MA2120	ZENER DIODE	12V
ZD602	KA33V	ZENER DIODE	33V
ZD603	130-410056-01	ZENER DIODE	5V6
ZD604	3.9V	ZENER DIODE	3V9
ZD901	130-410082-01	ZENER DIODE	8V2
ZD902	MA1091-M	ZENER DIODE	9V1

TRANSISTOR

Q101	2SC1923R	TRANSISTOR
Q102	2SC1815-Y	TRANSISTOR
Q103	2SC1815-Y	TRANSISTOR
Q104	2SC1815-Y	TRANSISTOR
Q105	2SC1815-Y	TRANSISTOR
Q106	2SC1815-Y	TRANSISTOR
Q107	2SC1815-Y	TRANSISTOR
Q108	2SC1815-Y	TRANSISTOR
Q109	2SC1815-Y	TRANSISTOR
Q301	2SC1815-Y	TRANSISTOR
Q302	2SC1815-Y	TRANSISTOR
Q401	2SC1815-Y	TRANSISTOR
Q402	2SD400F	TRANSISTOR
Q403	2SC2482	TRANSISTOR
Q404	2SD1554	TRANSISTOR
Q602	2SC1815-Y	TRANSISTOR
Q603	2SA1015	TRANSISTOR
Q604	2SC1815-Y	TRANSISTOR
Q605	2SC1815-Y	TRANSISTOR
Q606	2SC1815-Y	TRANSISTOR
Q607	2SD400F	TRANSISTOR
Q608	2SC1815-Y	TRANSISTOR
Q610	2SC1815-Y	TRANSISTOR
Q611	2SC1815-Y	TRANSISTOR
Q612	2SC1815-Y	TRANSISTOR
Q613	2SC1815-Y	TRANSISTOR
Q614	2SC1815-Y	TRANSISTOR
Q615	2SC1815-Y	TRANSISTOR
Q616	2SC1815-Y	TRANSISTOR
Q617	2SD400F	TRANSISTOR
Q618	2SC1815-Y	TRANSISTOR
Q619	2SC1815-Y	TRANSISTOR
Q620	2SC1815-Y	TRANSISTOR
Q621	2SC1815-Y	TRANSISTOR
Q901	2SC1815-Y	TRANSISTOR
Q902	2SB774(TA)	TRANSISTOR

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION
Q903	2SC1815-Y	TRANSISTOR	
Q904	2SD1545	TRANSISTOR	

IC

IC101	TA8701AN	IC	
IC102	HCF4066BE	IC	
IC201	TBA820M	IC	
IC301	AN5601K	IC	
IC401	LA7830	IC	
IC601	XL93LC46AP	IC	
IC602	TMS73C47	IC	
IC603	LA7910	IC	

OTHERS

	466-701201-01	FUSE HOLDER	
	103-161300-07	TUNER	
	250-691301-01	LED HOLDER	
CF101	007-105500-16	TRAP FILTER	
CF102	007-305500-06	CERAMIC FILTER	
DL301	113-200001-00	DELAY LINE	
DL302	113-100001-01	DELAY LINE	
⚠ F901	082-223150-23	FUSE	3.15A
J201	061-680000-01	21 PIN SOCKET	
⚠ L902	001-190005-95	LINE FILTER	
RLY401	006-210012-02	RELAY	
SA101	007-738900-39	SAW FILTER	
S601	046-100002-51	TACT SWITCH	
S602	046-100002-51	TACT SWITCH	
S603	046-100002-51	TACT SWITCH	
S604	046-100002-51	TACT SWITCH	
S605	046-100002-51	TACT SWITCH	
S606	046-100002-51	TACT SWITCH	
S607	046-100002-51	TACT SWITCH	
S608	046-100002-51	TACT SWITCH	
S609	046-100002-51	TACT SWITCH	
S610	046-100002-51	TACT SWITCH	
⚠ S901	046-100001-14A	POWER SWITCH	
TH901	014-210200-01	P.T.C THERMISTOR	
X301	037-886723-20F	CRYSTAL	
X601	CSA4.00MG	CERAMIC RESONATOR	

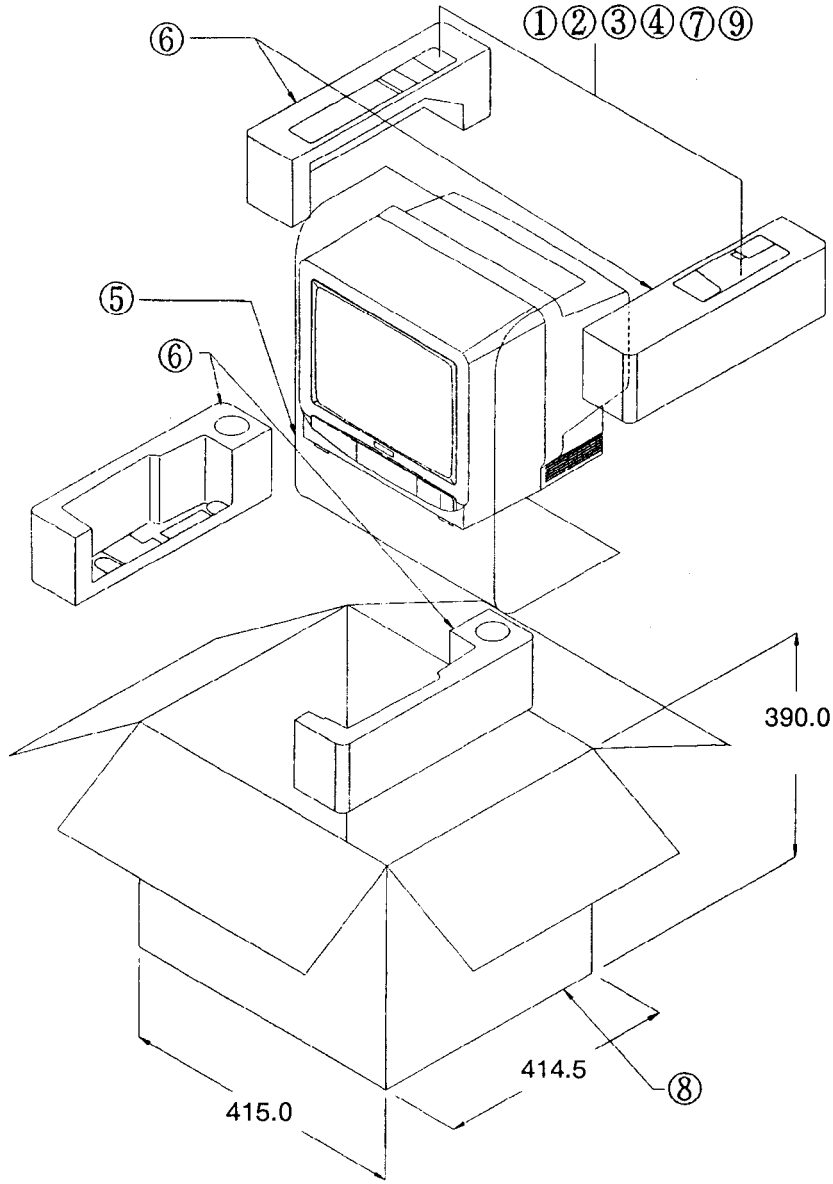
CRT SOCKET PW BOARD ASS'Y

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION	
VARIABLE RESISTOR				
VR501	012-202320-06	V R (R CUT OFF)	2KΩ	B
VR502	012-202320-06	V R (G CUT OFF)	2KΩ	B
VR503	112-301531-08	V R (G DRIVE)	300Ω	
VR504	012-202320-06	V R (B CUT OFF)	2KΩ	B
VR505	112-301531-08	V R (B DRIVE)	300Ω	
RESISTOR				
⚠ R501	013-129305-82	FP R	1.2Ω	1W 5%
R502	013-221105-12	C R	220Ω	1/4W 5%
R503	013-221105-12	C R	220Ω	1/4W 5%
R504	013-471105-12	C R	470Ω	1/4W 5%
R505	013-122105-12	C R	1.2KΩ	1/4W 5%
R506	013-222105-12	C R	2.2KΩ	1/4W 5%
R507	013-562105-12	C R	5.6KΩ	1/4W 5%
R508	013-123405-75	OM R	12KΩ	2W 5%
R509	013-272205-22	FP R	2.7KΩ	1/2W 5%
R510	013-272205-22	FP R	2.7KΩ	1/2W 5%
R511	013-332105-12	C R	3.3KΩ	1/4W 5%
R512	013-331105-12	C R	330Ω	1/4W 5%
R513	013-123405-75	OM R	12KΩ	2W 5%
R514	013-332105-12	C R	3.3KΩ	1/4W 5%
R515	013-331105-12	C R	330Ω	1/4W 5%
R516	013-272205-22	FP R	2.7KΩ	1/2W 5%
R517	013-123405-75	OM R	12KΩ	2W 5%
CAPACITOR				
C501	123-561350-10	C CAP.	560pF	50V 10%
C502	127-106047-01	E CAP.	10μF	16V 20%
C503	123-331340-10	C CAP.	330pF	50V 5%
C504	123-821840-40	C CAP.	820pF	2KV 5%
C505	123-271340-10	C CAP.	270pF	50V 5%
TRANSISTOR				
Q501	2SC2482	TRANSISTOR		
Q502	2SC2482	TRANSISTOR		
Q503	2SC2482	TRANSISTOR		
Q504	2SC2482	TRANSISTOR		
Q505	2SC2482	TRANSISTOR		
COIL				
L501	105-181101-02	FIXED INDUCTOR COIL	180μH	
OTHERS				
⚠	061-540016-01	CRT SOCKET		

CONTROL PW BOARD ASS'Y

⚠ SYMBL	PART NO	PART NAME	DESCRIPTION	
RESISTOR				
R601	013-102205-12	CR	1KΩ	1/2W 5%
R602	013-101005-12	CR	100Ω	1/16W 5%
R603	013-181005-12	CR	180Ω	1/16W 5%
CAPACITOR				
C601	127-476047-01	E CAP.	47μF	16V 20%
C602	123-102370-30	C CAP.	0.001μF	50V Z
DIODE				
LED601	SEL2110R	LED		
OTHERS				
OPT601	036-600781-00	INFRARED LIGHT DETECTING UNIT		

■ PACKING



■ PACKING PARTS LIST

⚠	REF. No.	PARTS No.	PARTS NAME	REMARKS
	1	310-111404-19B	POLY BAG	for INSTRUCTION BOOK
	2	310-051004-10B	POLY BAG	for AC CORD
⚠	3	071-660100-00	AC CORD	
⚠	4	570-861402-01	INSTRUCTION BOOK	
	5	310-396005-40B	EXPANDED POLY. FOAM PAPER	
	6	300-861401-02B	POLY FOAM	
	7	790-001511-08	REMOTE HANDSET UNIT	
	8	511-001501-01	CATON BOX	
	9	779-691001-01	ROD ANTENNA ASSY	